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SEARCH REQUEST FORM

12-334

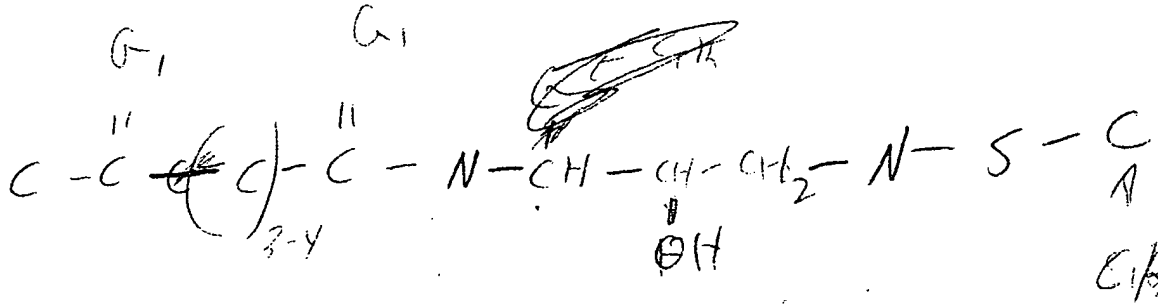
Requestor's Name: Grant

Serial Number: 09/041,016

Date: 12/9/98 Phone: 305 4531 Art Unit: 1613 3B09

Search Topic:

Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevent citations, authors, keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevent claim(s).



10/784,916
Examiner notes

G_1 = O, S, N

Search for 09/041,016 - 12/9/98
(parent application

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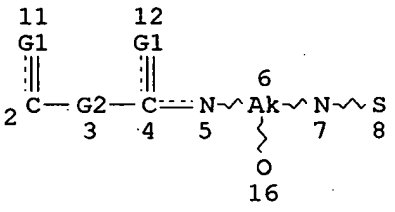


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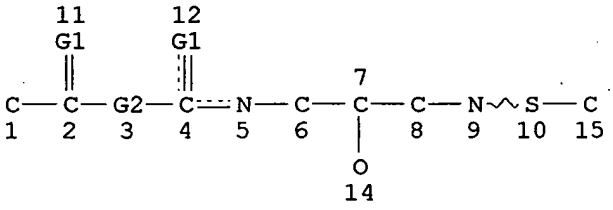


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L26          42 SEA FILE=WPIDS ABB=ON  PLU=ON  L23 AND L24
L27           3 SEA FILE=WPIDS ABB=ON  PLU=ON  L26 AND SUCCIN?
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L29          30 SEA FILE=WPIDS ABB=ON  PLU=ON  L26 AND SULPHON?
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=> d 130 bib abs tot

L30  ANSWER 1 OF 3  WPIDS  COPYRIGHT 1998 DERWENT INFORMATION LTD
AN   98-332223 [29]   WPIDS
CR   94-083052 [10];  95-392184 [50];  98-158356 [12]
```

DNC C98-102918
TI Inhibition of **retroviral protease** - by administration of **succinoyl**-amino-hydroxy-ethyl-amino **sulphonamide**.
DC B05
IN **DECRESCENZO, G A; FRESKOS, J N; GETMAN, D; MUELLER, R A; TALLEY, J J; VAZQUEZ, M L**
PA (MONS) MONSANTO CO; (SEAR) SEARLE & CO G D
CYC 1
PI US 5760076 A 980602 (9829)* 33 pp
ADT US 5760076 A CIP of US 92-935940 920825, Div ex US 93-110912 930824, US 95-541747 951010
FDT US 5760076 A Div ex US 5463104
PRAI US 93-110912 930824; US 92-935940 920825; US 95-541747 951010
AN 98-332223 [29] WPIDS
CR 94-083052 [10]; 95-392184 [50]; 98-158356 [12]
AB US 5760076 A UPAB: 980722
Inhibition of a **retroviral protease** comprises administering composition comprising a hydroxyethylaminosulphonamide derivative of formula (I), or one of its salts, and a carrier. x = 0-2; t = 0 or 1; R1 = H, -CH2SO2NH2, -CO2CH3, -CONHCH3, -CON(CH3)2, -CH2C(O)NHCH3, -CH2C(O)N(CH3)2, -CONH2, -C(CH3)2(SH), -C(CH3)2(SCH3), -C(CH3)2(S(O)CH3), -C(CH3)2(S(O)2CH3), alkyl, halo alkyl, alkenyl, alkynyl, cycloalkyl, or the side chain of asparagine, S-methyl cysteine and their corresponding sulphoxide and **sulphone** derivatives, glycine, leucine, isoleucine, allo-leucine, tertiary leucine, phenylalanine, ornithine, alanine, histidine, norleucine, glutamine, valine, threonine, serine, o-alkyl serine, aspartic acid, beta -cyano alanine or allothreonine; R2 = alkyl, aryl, cycloalkyl, cycloalkylalkyl or arylalkyl (each optionally substituted with halo or alkyl), -NO2, -C triple bond N, CF3, -OR9 or -SR9; R9 = H, or alkyl; R3 = H, alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl , alkoxyalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heteroaryl, heterocycloalkylalkyl, aryl, aralkyl, heteroaralkyl, aminoalkyl (optionally mono- or disubstituted by alkyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroarylalkyl, heterocycloalkyl or heterocycloalkylalkyl or in the case of disubstitution, the substituents together with the nitrogen atom to which they are attached form heterocycloalkyl or heteroaryl); X' = N, O or C(R17); R17 = H, or alkyl; Y, Y' = O, S or NR15; R15 = R3; R4 = alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heteroaryl, heterocycloalkylalkyl, aryl, aralkyl, heteroaralkyl, aminoalkyl (optionally mono- or disubstituted by alkyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroarylalkyl, heterocycloalkyl or heterocycloalkylalkyl or in the case of disubstitution, the substituents together with the nitrogen atom to which they are attached form heterocycloalkyl or heteroaryl); R6 = H or alkyl; R30-R32 = R1 or one of R1 and R30 together with one of R31 and R32 and the carbon atoms to which they are attached form cycloalkyl or R30 and R30 together with the carbon atoms to which they are attached form 3-6C cycloalkyl; R33, R34 = R3; or R33 and R34 together with X' = cycloalkyl, aryl, heterocyclyl or heteroaryl, provided that when X' is O, then R34 is absent.

USE - The method is used in the inhibition of HIV **protease**, and is thus useful in the treatment of HIV infection and AIDS (claimed). The method can also be used to inhibit

other strains of HIV, such as HIV-2, and other viruses such as human T-cell leukaemia virus, simian immunodeficiency virus, feline leukaemia virus, respiratory syncitial virus, hepadnavirus, cytomegalovirus and picornavirus.
Dwg.0/0

L30 ANSWER 2 OF 3 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD
AN 97-020446 [02] WPIDS
DNC C97-006581
TI New (amino-hydroxy-phenyl-butyl) **sulphonyl** urea derivs. - with N-(quinolinyl-carbonyl)amino-**succinamide** gp., useful as **retroviral protease** inhibitors.
DC B02
IN **DECRESCENZO, G A; GETMAN, D P; MUELLER, R A;** SUN, E T; **TALLEY, J J; VAZQUEZ, M L**
PA (SEAR) SEARLE & CO G D
CYC 1
PI US 5578606 A 961126 (9702)* 37 pp
ADT US 5578606 A US 92-968712 921030
PRAI US 92-968712 921030
AN 97-020446 [02] WPIDS
AB US 5578606 A UPAB: 970108
Peptide analogues of formula (I) and their salts are new. n = 0-2; R3 = alkyl (opt. substd. by Ar, pyridyl, pyrrolyl, imidazolyl, pyrazolyl, pyrimidinyl, triazolyl, oxazolyl or thiazolyl); Ar = phenyl (opt. substd. by Me, OMe, t-butoxy, F, Cl, OH, NH2 or CN); R8 = as R3, CN, OH or COOH, alkylthio, alkylsulphonyl, SO2Ar, 1-8C alkanoyl, alkoxycarbonyl (opt. substd. by Ar, dicarbamoyl, dialkylamino, NRAr, 2-(Het)ethoxy, pyrrolidinyl, piperidinyl, morpholinyl, thiomorpholinyl or 4-alkylpiperazinyl; Het = pyrrolidinyl, piperidinyl, piperazinyl, morpholinyl or thiomorpholinyl; R = alkyl; alkyl, alkoxy have 1-8C.
USE - (I) are **retroviral** (esp. HIV) **protease** inhibitors for treating **retroviral** infections. Daily dose is 0.001-10 (esp. 0.01-1) mg/kg.
Dwg.0/0

L30 ANSWER 3 OF 3 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD
AN 95-392184 [50] WPIDS
CR 94-083052 [10]; 98-158356 [12]; 98-332223 [29]
DNC C95-168971
TI 3-**Sulphonamido**-propanol amide(s) of **succinic** and glutaric acids - are **retroviral protease** inhibitors, used for e.g. HIV, leukaemia viruses, cytomegalovirus, picornavirus, feline and simian viruses.
DC B05
IN **DECRESCENZO, G A; FRESKOS, J N; GETMAN, D; MUELLER, R A; TALLEY, J J; VAZQUEZ, M L**
PA (SEAR) SEARLE & CO G D
CYC 1
PI US 5463104 A 951031 (9550)* 32 pp
ADT US 5463104 A CIP of US 92-935490 920825, US 93-110912 930824
PRAI US 93-110912 930824; US 92-935490 920825
AN 95-392184 [50] WPIDS
CR 94-083052 [10]; 98-158356 [12]; 98-332223 [29]
AB US 5463104 A UPAB: 980722
3-**Sulphonamido**-propanolamides of **succinic** and glutaric acids, of formula(I), and their salts and esters, are new:

x = 0-2; t = 0 or 1; Y, Y' = O or S; X' = NR34 or O; or X'R33 together = 3-8C cyclohexyl or aryl; all aryl = phenyl or naphthyl (both opt. substd. by alkyl, alkoxy, halo, OH, amino, NHAc, nitro, cyano, or haloalkyl); R1, R30-R32 = H, OH, CH2Ac, CH2SO2NH2, COOMe, CONHMe, CONMe2, CONH2, CMe2SH, CMe2SMe, CMe2SOMe, 1-8C alkyl or haloalkyl, 2-8C alkenyl, 2-10C alkynyl, aralkyl, 3-8C cycloalkyl, or the side chain of the amino acids aspargine, S-methylcysteine or its SO or SO2 analogues, leucine, isoleucine, alloisoleucine, tert-leucine, norleucine, phenylalanine, ornithine, alanine, glutamine, valine, threonine, allothreonine, serine and O-alkyl derivs., aspartic acd, or beta-cyanoalanine; (note: all alkenyl can include more than one double bond); or R30, R32 and attached C atoms = 3-8C cycloalkyl; R2 = 1-8C alkyl, aryl, aralkyl, 3-8C cycloalkyl, cycloalkylalkyl (all opt. substd. by halo, alkyl, nitro, cyano, CF3, OR9, or SR9; R9 = H or 1-8C alkyl; R3, R33, R34 = H, 1-8C alkyl or haloalkyl or hydroxyalkyl, 2-8C alkenyl, 2-10C alkynyl, 1-8C alkoxy, 1-8C alkyl, 3-8C cycloalkyl, cycloalkylalkyl, aryl, aralkyl, or aminoalkyl (opt. N-mono- or N,N-di- substd. by alkyl, aryl, aralkyl, cycloalkyl, or cycloalkylalkyl); R4 = as R3 but not H; and R6 = H or 1-8C alkyl.

USE - (I) have antiviral activity, partic. **retroviral**, as **protease** inhibitors. They are of use for treatment and prophylaxis of HIV, and expected to be also for HIV-2, human T-cell leukaemia, simian immunodeficiency, feline leukaemia, and respiratory syncytial viruses, hepadanavirus, cytomegalovirus, and picornavirus.

Dwg.0/0

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                  SEL PN APPS

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L31             3 S E1-E8
                  SEL RN

     FILE 'REGISTRY' ENTERED AT 15:05:27 ON 09 DEC 1998
L32            93 S E9-E101
L33            17 S L11 AND L32

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FILE LAST UPDATED: 9 Dec 1998 (981209/ED)

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This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

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L31 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 1998 ACS
AN 1996:725344 HCAPLUS
DN 126:75247
TI Preparation of .alpha.- and .beta.-amino acid hydroxyethylamino sulfonyl urea derivatives as retroviral protease inhibitors
IN Vazquez, Michael L.; Mueller, Richard A.; Talley, John J.; Getman, Daniel P.; Decrescenzo, Gary A.; Sun, Eric T.
PA G. D. Searle & Co., USA
SO U.S., 37 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5578606	A	19961126	US 92-968712	19921030 <--

OS MARPAT 126:75247
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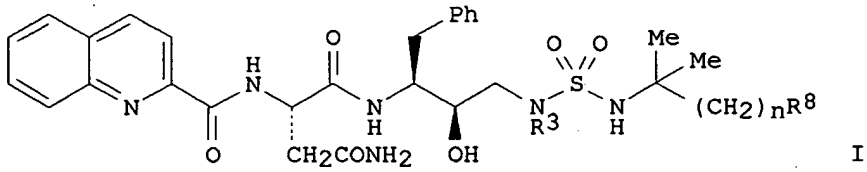

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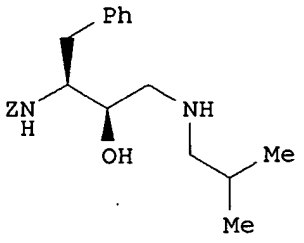

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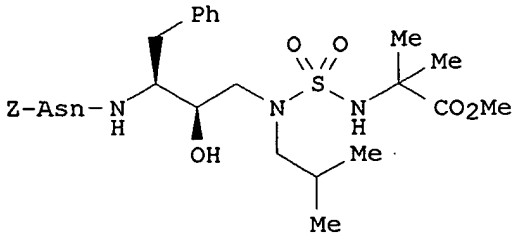

III

AB .alpha.- And .beta.-amino acid hydroxyethylamino sulfonyl urea deriv. compds., e.g. I [R3 = C1-8 alkyl, (un)substituted C1-8 alkylphenyl, C1-8 heteroaralkyl; R8 = (un)substituted Ph, heterocyclyl, CN, OH, CO2H, C1-8 alkylthio, (un)substituted phenylsulfonyl, C1-8 alkanoyl, C1-8 alkoxycarbonyl, C1-8 dialkylaminocarbonyl, N-C1-8- alkyl-N-phenylcarbamoyl,

2-heterocyclylethoxy, heterocyclyl; n = 0-2], are effective as retroviral protease inhibitors, and in particular as inhibitors of HIV protease. Thus, coupling of protected amino(hydroxy)phenylbutylamine II (Z = PhCH2O2C) (prepd. in 3 steps from chloromethyl ketone Z-L-Phe-CH2Cl) with ClSO2NHCMe2CO2Me, followed by hydrogenolysis and coupling with Z-Asn-OH gave inhibitor III.

L31 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 1998 ACS
AN 1995:964989 HCAPLUS
DN 124:176937
TI N-[(Succinoylamino)hydroxypropyl]sulfonamides useful as retroviral protease inhibitors
IN Vazquez, Michael L.; Mueller, Richard A.; Talley, John J.; Getman, Daniel; Decrescenzo, Gary A.; Freskos, John N.
PA G. D. Searle and Co., USA
SO U.S., 32 pp. Cont.-in-part of U.S. Ser. No. 935,490, abandoned
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 2

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	ES 2103488	T3	19970916	ES 93-920213	19930824 <--
	US 5714605	A	19980203	US 95-541350	19951010 <--
	US 5760076	A	19980602	US 95-541747	19951010 <--
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OS MARPAT 124:176937
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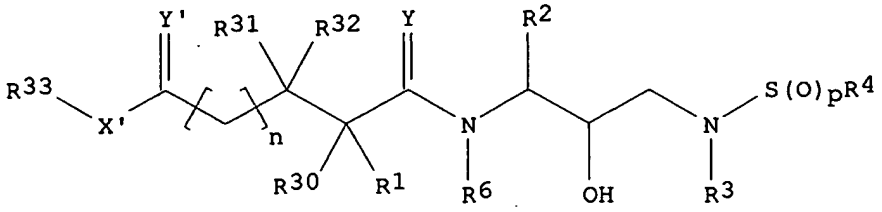

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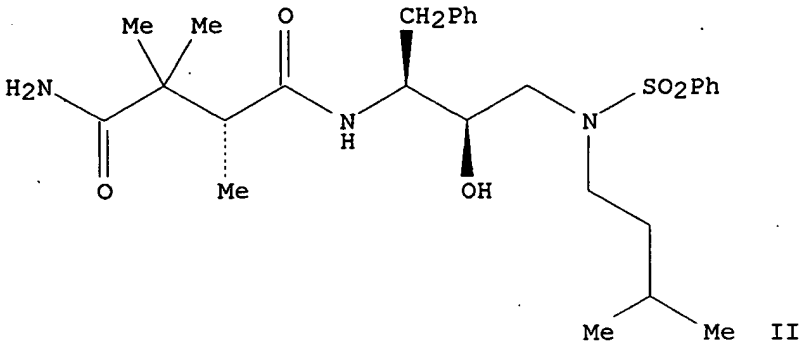

II

AB Succinoylamino hydroxyethylamino sulfonamide compds. I or a pharmaceutically acceptable salt or ester thereof, wherein p represents 0, 1 or 2; n represents either 0 or 1; X' represents N(R34) or O; or R33X' represents cycloalkyl or aryl radicals; Y and Y' each independently represent O or S; R1, R30, R31 and R32 each independently represent hydrogen, OH, (CH2)C(O)CH3, CH2SO2NH2, CO2CH3, CONHCH3, CON(CH3)2, CH2C(O)NHCH3, CH2C(O)N(CH3)2, CONH2, C(CH3)2(SH), C(CH3)2(SCH3), C(CH3)2[S(O)CH3], C(CH3)2[S(O)2CH3], alkyl, haloalkyl, alkenyl, alkynyl, aralkyl or cycloalkyl radicals, or the side chain of the amino acid asparagine, S-Me cysteine or the corresponding sulfoxide or sulfone derivs. thereof, leucine, isoleucine, allo-isoleucine, tert-leucine, phenylalanine, ornithine, alanine, norleucine, glutamine, valine, threonine, serine, o-alkyl serine, aspartic acid, .beta.-cyanoalanine or allothreonine; or R30 and R32 together with the carbon atoms to which they are attached form a cycloalkyl radical; R2 = e.g., alkyl, aryl, cycloalkyl; R3, R33, R34 = e.g., H, alkyl, haloalkyl; R4 = e.g., alkyl, haloalkyl, alkenyl; R6 = H, alkyl; are effective as retroviral protease inhibitors, and in particular as inhibitors of HIV protease. Thus, e.g., butanediamide II was prepd. by coupling of benzyl (R)-2,2,3-trimethylsuccinate (prepn. given) with 2(R)-hydroxy-3-[(3-methylbutyl)(phenylsulfonyl)amino]-1(S)-(phenylmethyl)propylamine (prepn. given) followed by benzyl ester hydrogenolysis and amidation, and exhibited IC50 = 2 nM for inhibition of HIV protease.

L31 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 1998 ACS
AN 1994:579258 HCAPLUS
DN 121:179258
TI N-(alkanoylamino-2-hydroxypropyl)sulfonamides useful as HIV protease inhibitors
IN Vazquez, Michael L.; Mueller, Richard A.; Talley, John J.; Getman,

Daniel; Decrescenzo, Gary A.; Freskos, John N.
PA Searle, G. D., and Co., USA; Monsanto Co.
SO PCT Int. Appl., 103 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

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	ES 2103488	T3	19970916	ES 93-920213	19930824	<--
	AU 674702	B2	19970109	AU 93-50819	19930825	<--
	NO 9500670	A	19950222	NO 95-670	19950222	<--
	FI 9500841	A	19950223	FI 95-841	19950223	<--
PRAI	US 92-935490	19920825	<--			
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OS MARPAT 121:179258
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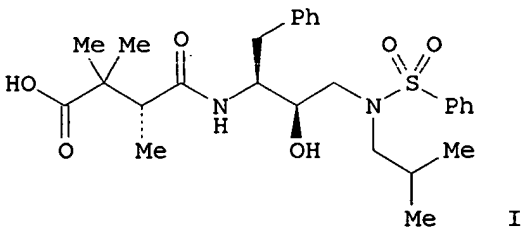


I

AB The title compds. R33(R34)X1C(:Y1)(CH2)tC(R31)(R32)C(R30)(R1)C(:Y)N(R6)C(R2)HC(OH)HCH2N(R3)S(O)xR4 [R1 = H, CH2SO2NH2, CO2Me, CONHMe, CONMe2, etc.; R2 = alkyl, aryl, cycloalkyl, (un)substituted cycloalkylalkyl and arylalkyl; R3 = H, alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, cycloalkyl, etc.; R4 = alkyl, haloalkyl alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, cycloalkyl etc.; R6 = H, alkyl; R30-R32 = R1; R1R30R31 = cycloalkyl; R1R30R32C = cycloalkyl; R33, R34 = H, R3; R33R34X1 = cycloalkyl, aryl, hetrocyclyl, etc.; X1 = O, N, CR17; R17 = H, alkyl; Y, Y1 = O, S, NR15; R15 = H, R3; t = 0, 1; x = 0-2], useful as HIV protease inhibitors for the treatment of AIDS, are prepd. Thus, sulfonamide I was prepd. and demonstrated IC50 against HIV protease of 1 nmol.

=> fil reg

FILE 'REGISTRY' ENTERED AT 15:07:13 ON 09 DEC 1998
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

STRUCTURE FILE UPDATES: 6 DEC 98 HIGHEST RN 215160-44-4
DICTIONARY FILE UPDATES: 9 DEC 98 HIGHEST RN 215160-44-4

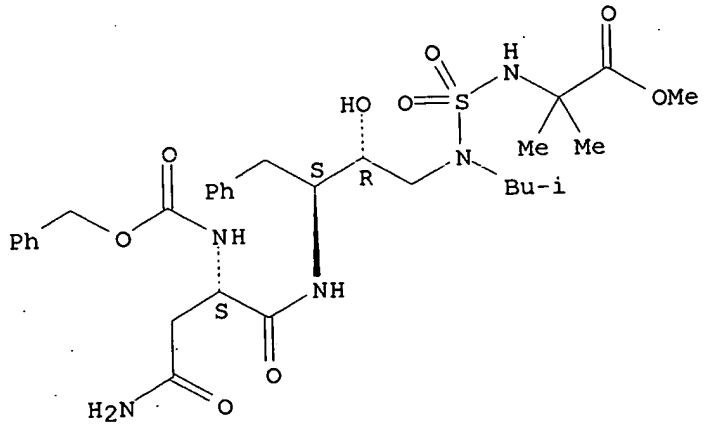
TSCA INFORMATION NOW CURRENT THROUGH JUNE 29, 1998

Please note that search-term pricing does apply when conducting SmartSELECT searches.

=> d ide can tot l33

L33 ANSWER 1 OF 17 REGISTRY COPYRIGHT 1998 ACS
RN **185256-67-1** REGISTRY
CN 10-Thia-2,5,9,11-tetraazatridecanedioic acid, 3-(2-amino-2-oxoethyl)-7-hydroxy-12,12-dimethyl-9-(2-methylpropyl)-4-oxo-6-(phenylmethyl)-, 13-methyl 1-(phenylmethyl) ester, 10,10-dioxide, [3S-(3R*,6R*,7S*)]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C31 H45 N5 O9 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 126:75247

L33 ANSWER 2 OF 17 REGISTRY COPYRIGHT 1998 ACS
RN **173590-71-1** REGISTRY
CN Butanediamide, N4-[2-hydroxy-3-[(2-methylpropyl)(phenylsulfonyl)amino]-1-(phenylmethyl)propyl]-2,2,3-trimethyl-, [1S-[1R*(S*),2S*]]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C27 H39 N3 O5 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

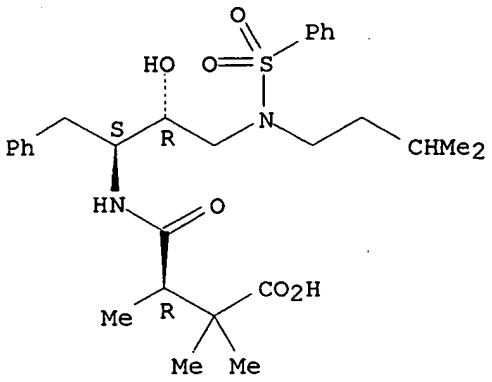
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 124:176937

REFERENCE 2: 121:179258

L33 ANSWER 15 OF 17 REGISTRY COPYRIGHT 1998 ACS
RN **157445-98-2** REGISTRY
CN Butanoic acid, 4-[[2-hydroxy-3-[(3-methylbutyl)(phenylsulfonyl)amino]-1-(phenylmethyl)propyl]amino]-2,2,3-trimethyl-4-oxo-, [1S-[1R*(S*),2S*]]- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN SC 98A
FS STEREOSEARCH
MF C28 H40 N2 O6 S
SR CA
LC STN Files: CA, CAPLUS, IPA, TOXLINE, TOXLIT, USPATFULL

Absolute stereochemistry.



3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

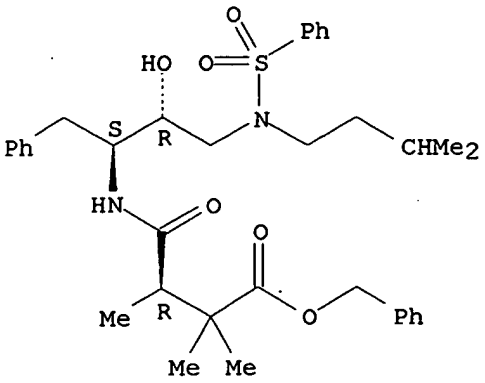
REFERENCE 1: 124:193129

REFERENCE 2: 124:176937

REFERENCE 3: 121:179258

L33 ANSWER 16 OF 17 REGISTRY COPYRIGHT 1998 ACS
RN **157445-97-1** REGISTRY
CN Butanoic acid, 4-[[2-hydroxy-3-[(3-methylbutyl)(phenylsulfonyl)amino]-1-(phenylmethyl)propyl]amino]-2,2,3-trimethyl-4-oxo-, phenylmethyl ester, [1S-[1R*(S*),2S*]]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C35 H46 N2 O6 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



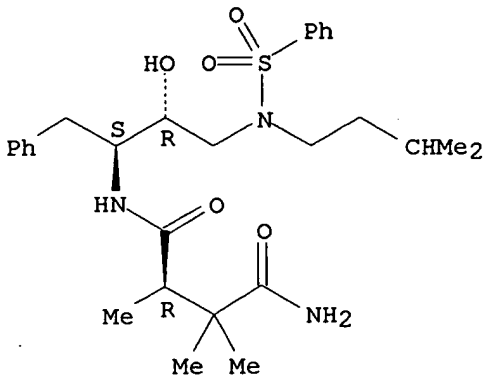
2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 124:176937

REFERENCE 2: 121:179258

L33 ANSWER 17 OF 17 REGISTRY COPYRIGHT 1998 ACS
RN **157445-96-0** REGISTRY
CN Butanediamide, N4-[2-hydroxy-3-[(3-methylbutyl)(phenylsulfonyl)amino]-1-(phenylmethyl)propyl]-2,2,3-trimethyl-, [1S-[1R*(S*),2S*]]-(9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C28 H41 N3 O5 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

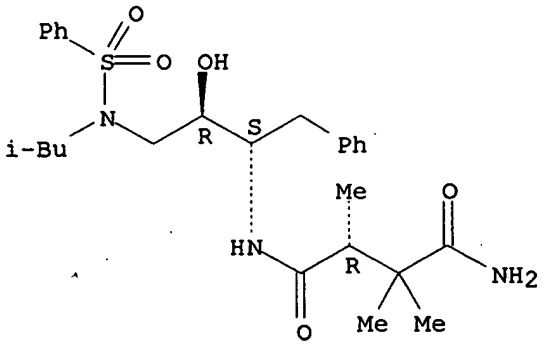


2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 124:176937

REFERENCE 2: 121:179258

Absolute stereochemistry.

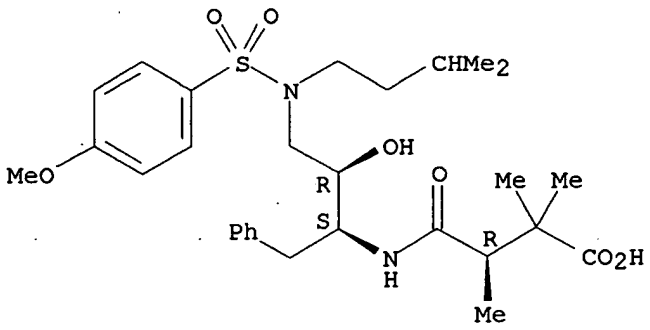


1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 124:176937

L33 ANSWER 3 OF 17 REGISTRY COPYRIGHT 1998 ACS
RN **157474-44-7** REGISTRY
CN Butanoic acid, 4-[[2-hydroxy-3-[[(4-methoxyphenyl)sulfonyl](3-methylbutyl)amino]-1-(phenylmethyl)propyl]amino]-2,2,3-trimethyl-4-oxo-, [1S-[1R*(S*),2S*]]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C29 H42 N2 O7 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

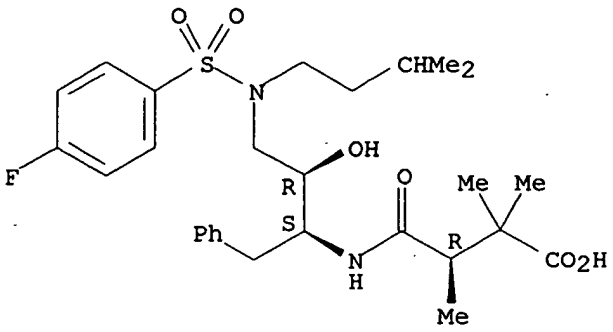
REFERENCE 1: 124:176937

REFERENCE 2: 121:179258

L33 ANSWER 4 OF 17 REGISTRY COPYRIGHT 1998 ACS
RN **157446-09-8** REGISTRY
CN Butanoic acid, 4-[[3-[[(4-fluorophenyl)sulfonyl](3-methylbutyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]amino]-2,2,3-trimethyl-4-oxo-, [1S-[1R*(S*),2S*]]- (9CI) (CA INDEX NAME)

FS STEREOSEARCH
MF C28 H39 F N2 O6 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



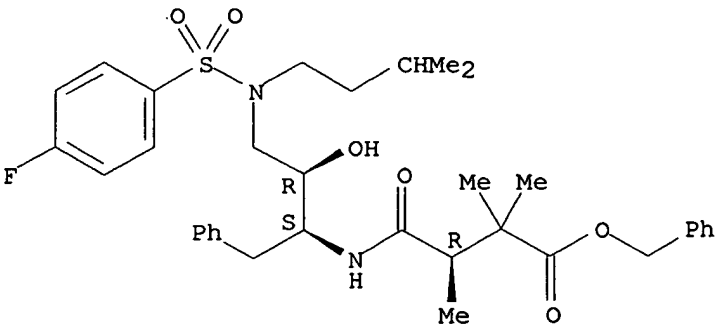
2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 124:176937

REFERENCE 2: 121:179258

L33 ANSWER 5 OF 17 REGISTRY COPYRIGHT 1998 ACS
RN **157446-08-7** REGISTRY
CN Butanoic acid, 4-[[3-[[(4-fluorophenyl)sulfonyl](3-methylbutyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]amino]-2,2,3-trimethyl-4-oxo-, phenylmethyl ester, [1S-[1R*(S*),2S*]]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C35 H45 F N2 O6 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



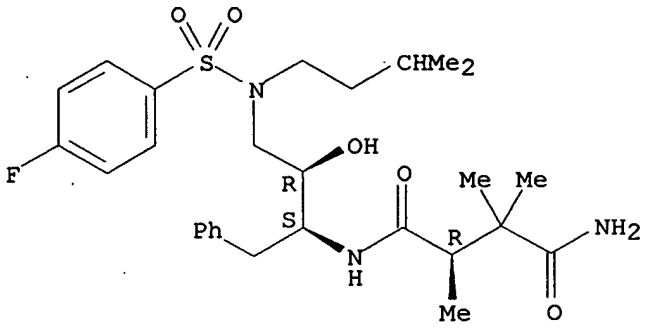
2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 124:176937

REFERENCE 2: 121:179258

L33 ANSWER 6 OF 17 REGISTRY COPYRIGHT 1998 ACS
RN **157446-07-6** REGISTRY
CN Butanediamide, N4-[3-[[(4-fluorophenyl)sulfonyl](3-methylbutyl)amino]-2-hydroxy-1-(phenylmethyl)propyl]-2,2,3-trimethyl-, [1S-[1R*(S*),2S*]]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C28 H40 F N3 O5 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



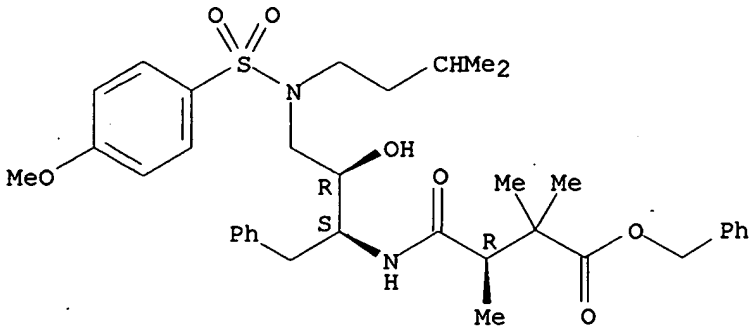
2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 124:176937

REFERENCE 2: 121:179258

L33 ANSWER 7 OF 17 REGISTRY COPYRIGHT 1998 ACS
RN **157446-06-5** REGISTRY
CN Butanoic acid, 4-[[2-hydroxy-3-[[(4-methoxyphenyl)sulfonyl](3-methylbutyl)amino]-1-(phenylmethyl)propyl]amino]-2,2,3-trimethyl-4-oxo-, phenylmethyl ester, [1S-[1R*(S*),2S*]]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C36 H48 N2 O7 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



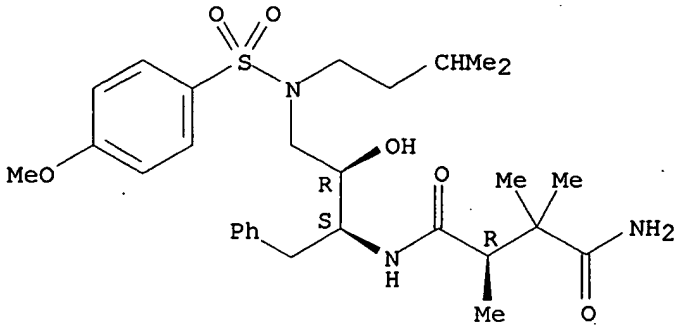
2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 124:176937

REFERENCE 2: 121:179258

L33 ANSWER 8 OF 17 REGISTRY COPYRIGHT 1998 ACS
RN **157446-05-4** REGISTRY
CN Butanediamide, N4-[2-hydroxy-3-[[(4-methoxyphenyl)sulfonyl](3-methylbutyl)amino]-1-(phenylmethyl)propyl]-2,2,3-trimethyl-, [1S-[1R*(S*),2S*]]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C29 H43 N3 O6 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

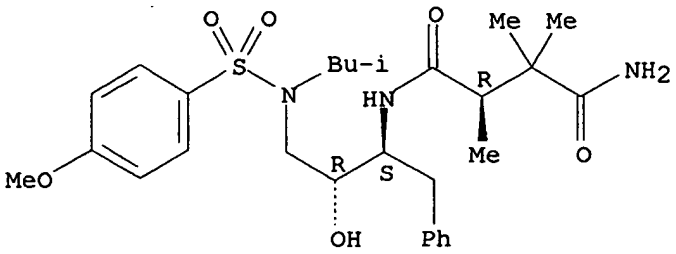
REFERENCE 1: 124:176937

REFERENCE 2: 121:179258

L33 ANSWER 9 OF 17 REGISTRY COPYRIGHT 1998 ACS
RN **157446-04-3** REGISTRY
CN Butanediamide, N4-[2-hydroxy-3-[[(4-methoxyphenyl)sulfonyl](2-methylpropyl)amino]-1-(phenylmethyl)propyl]-2,2,3-trimethyl-,

[1S-[1R*(S*),2S*]]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C28 H41 N3 O6 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



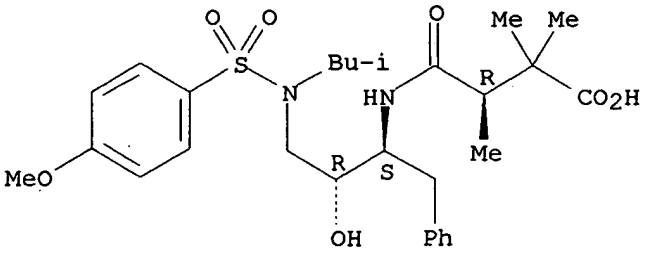
2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 124:176937

REFERENCE 2: 121:179258

L33 ANSWER 10 OF 17 REGISTRY COPYRIGHT 1998 ACS
RN **157446-03-2** REGISTRY
CN Butanoic acid, 4-[[2-hydroxy-3-[[(4-methoxyphenyl)sulfonyl](2-methylpropyl)amino]-1-(phenylmethyl)propyl]amino]-2,2,3-trimethyl-4-oxo-, [1S-[1R*(S*),2S*]]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C28 H40 N2 O7 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

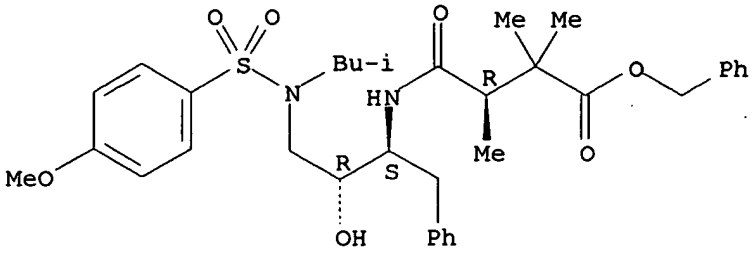
REFERENCE 1: 124:176937

REFERENCE 2: 121:179258

L33 ANSWER 11 OF 17 REGISTRY COPYRIGHT 1998 ACS
RN **157446-02-1** REGISTRY
CN Butanoic acid, 4-[[2-hydroxy-3-[[(4-methoxyphenyl)sulfonyl](2-

methylpropyl)amino]-1-(phenylmethyl)propyl]amino]-2,2,3-trimethyl-4-oxo-, phenylmethyl ester, [1S-[1R*(S*),2S*]]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C35 H46 N2 O7 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



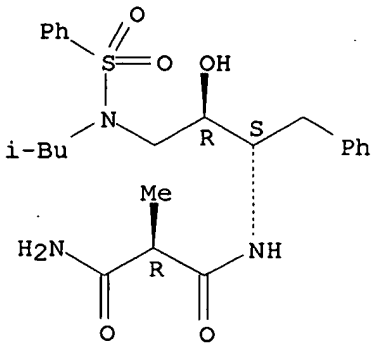
2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 124:176937

REFERENCE 2: 121:179258

L33 ANSWER 12 OF 17 REGISTRY COPYRIGHT 1998 ACS
RN **157446-01-0** REGISTRY
CN Propanediamide, N-[2-hydroxy-3-[(2-methylpropyl)(phenylsulfonyl)amino]-1-(phenylmethyl)propyl]-2-methyl-, [1S-[1R*(S*),2S*]]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C24 H33 N3 O5 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



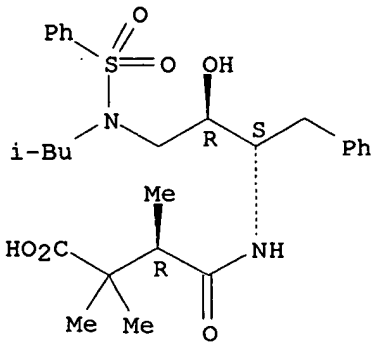
1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 121:179258

L33 ANSWER 13 OF 17 REGISTRY COPYRIGHT 1998 ACS

RN **157446-00-9** REGISTRY
CN Butanoic acid, 4-[[2-hydroxy-3-[(2-methylpropyl)(phenylsulfonyl)amino]-1-(phenylmethyl)propyl]amino]-2,2,3-trimethyl-4-oxo-, [1S-[1R*(S*),2S*]]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C27 H38 N2 O6 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



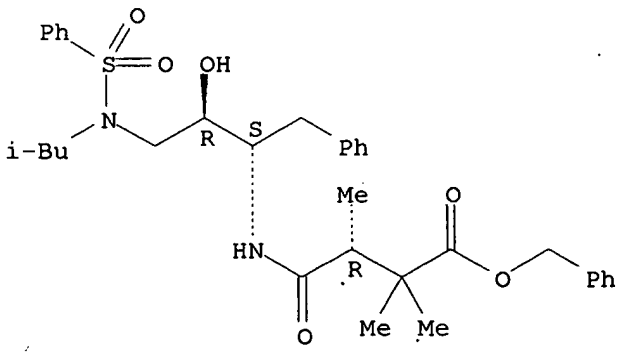
2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 124:176937

REFERENCE 2: 121:179258

L33 ANSWER 14 OF 17 REGISTRY COPYRIGHT 1998 ACS
RN **157445-99-3** REGISTRY
CN Butanoic acid, 4-[[2-hydroxy-3-[(2-methylpropyl)(phenylsulfonyl)amino]-1-(phenylmethyl)propyl]amino]-2,2,3-trimethyl-4-oxo-, phenylmethyl ester, [1S-[1R*(S*),2S*]]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C34 H44 N2 O6 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



2 REFERENCES IN FILE CA (1967 TO DATE)